



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8**

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MAY 18 2006

Ref: EPR-N

Mike Duncan
Forest Botanist
Wasatch-Cache National Forest
8236 Federal Building
125 South State Street
Salt Lake City, UT 84138

Re: Wasatch Cache National Forest Noxious and
Invasive Weed Treatment Project - Draft EIS
CEQ 20060075

Dear Mr. Duncan:

In accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act, the U.S. Environmental Protection Agency Region 8 (EPA) has reviewed the *Wasatch Cache National Forest Noxious and Invasive Weed Treatment Project - Draft Environmental Impact Statement (DEIS)* on the Wasatch Cache National Forest (WCNF). With this project the US Forest Service (USFS) proposes to treat noxious weeds on 1.2 million acres of wilderness and non-wilderness areas. The project addresses existing and future potential noxious weed infestations.

The EPA concurs with the need in the WCNF for an expanded integrated weed management program to prevent the establishment and spread of noxious weeds. The EPA commends proposed efforts to address invasive weed infestations before weed problems become an epidemic. Noxious weeds are a great threat to biodiversity, and can out-compete native plants and produce a monoculture that has little or no plant species diversity or benefit to wildlife. Impacts to native plant communities are much reduced when control actions are taken at an early stage of invasion.

Integrated Weed Management

We support proposed integrated weed management methods in the preferred alternative, Alternative 2, and we recognize that aerial application of herbicides facilitates effective weed management where there are large areas of weed infestation across inaccessible terrain. We do consider it important, however, to ensure that adequate measures are incorporated into aerial applications to mitigate risks of adverse health and environmental effects (e.g., avoid drift of

potentially toxic herbicides to aquatic areas or other sensitive areas). The environmental protection measures included Section 2.3.7.4 appear to recognize the need to avoid drift of herbicides to non-target areas. EPA is pleased to see that consideration has been given to assuring the accuracy and safety of aerial pesticide applications.

An Integrated Weed Management program should also strive to identify the reason(s) *why* noxious and invasive weeds are present. We therefore suggest adding a discussion to Section 3.3.1.3.1 on the probable causes of noxious and invasive weed establishments within each Management Zone on the Forest (i.e. logging practices, grazing practices, recreational activities, erosion, etc.). By describing why weeds have become a problem, the Forest may be better able to apply strategies to mitigate root causes.

Monitoring and Adaptive Management

The DEIS does not include a monitoring and adaptive management program to guide management actions and assess effectiveness of the Treatment Program. We recommend that a strong monitoring and adaptive management program be added in the Final EIS that includes monitoring of the density and rate of spread and effects of invasive plants on natural resources; effectiveness of herbicides and biological control agents; and the presence of herbicides in surface and ground water in high risk areas. It is important to have an adaptive management program that monitors treatment activities and effects to document effective weed treatment with minimal impacts on non-target species, and to avoid other adverse environmental or public health effects. We encourage the Forest to track weed infestations, control actions, and effectiveness of control action in a Forest-level weed database.

It is important that monitoring of water samples is included to detect the presence of herbicides from drift, leaching or runoff. This monitoring would typically be targeted at higher risk practices (e.g. aerial application), larger scale treatments, treatment adjacent to a sensitive community (e.g. aquatic or plant communities deserving extra protection), or use of particularly mobile, toxic or persistent herbicides. The Forest may also want to consider groundwater monitoring in selected wells in close proximity to larger application sites. Aquatic monitoring is an important element of an effective weed management program utilizing herbicides to validate that herbicide application protocols and environmental protection measures are effective in preventing herbicide transport to surface and ground waters. Such monitoring should increase public confidence that chemical contamination of surface waters does not occur. Herbicide presence in water can affect aquatic ecosystem function even when present at levels below human health standards. We do recommend that additional information be provided regarding monitoring for herbicides to validate effectiveness of environmental protection measures (see enclosure). The Forest may also want to consider monitoring for herbicide concentrations in soils, and soil microbiologic assays or assessments of soil fertility. We also recommend that information be disclosed in the FEIS showing aquatic toxicity of the proposed herbicides for the fish species present in the areas to be treated.

The health of downstream domestic, agricultural and recreational water users and of the aquatic ecosystem should dictate some level of aquatics monitoring to document and verify that aqueous transport of herbicides does not occur. Picloram and clopyralid should be prioritized for

monitoring as they are highly soluble and mobile. Such monitoring will also verify that mitigation measures were effective in avoiding herbicide drift to streams and wetlands, and may increase public confidence that chemical contamination of surface waters did not occur.

EPA Rating

Based primarily on the lack of a monitoring and adaptive management program to assure that program objectives are met while protecting environmental resources and human health, EPA has issued a rating of **EC-2 (Environmental Concerns - Insufficient Information)**. The "EC" rating indicates that the EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative, or application of mitigation measures or actions that can reduce these impacts. The "2" indicates that EPA has identified additional information, data, analyses or discussion should be included in the Final EIS. A full description of EPA's EIS rating system is enclosed.

We appreciate the opportunity to review this project. EPA's review of the Wasatch Cache National Forest Noxious and Invasive Weed Treatment Project is being coordinated by Phil Strobel (303 312-6704) of my staff. Please feel free to contact Phil or me at (303) 312-6004 regarding these comments.

Sincerely,



Larry Svoboda
Director, NEPA Program
Office of Ecosystems Protection
and Remediation

Enclosure